winding the coil antenna, the electronic chip module must be inserted into the Z-shaped recess and bonded to the ends of the coil antenna.

That is to say that, notwithstanding the Examiner's objection, there is required an **additional** electrical connection to the ends of the coil antenna **after** inserting the chip carrier module into the Z-shaped recess of the bobbin.

In contrast, claim 1 distinguishes over Hakkers at least by the following recitation:

> the chip carrier module being packaged into one discrete unit so as to be amenable to mechanical assembly of the data transaction card without requiring additional electrical connections between the coil antenna and the chip carrier module during or subsequent to assembly.

Moreover, Claim 1 as amended now recites the further limitation that the coil antenna (40) is formed in the substrate and is electrically connected thereto and is connected via the substrate to the integrated circuit also mounted in the substrate. This is distinct from Hakkers *et al.* where the coil assembly is mechanically mounted into the substrate but is **not** electrically connected thereto and where the substrate does not itself serve as a medium for electrically connecting the antenna to the integrated circuit.

It is further reiterated that even it were somehow possible to combine the core components in Hakkers *et al.* (i.e. the two end plates 10 and 11 and the inner core 15), this would still not obviate the need to bond chip carrier module to the coil antenna after inserting the chip carrier module into the core.

It is thus believed that Claim 1 is properly distinguished over the cited reference.

Claims 6 to 17 recite additional features and are likewise considered to be allowable at least in view of their depency from Claim 1. Claims 12-15 are directed to the provision of two flat coil antennas on **opposing surfaces** of the data transaction card so that they behave as a capacitive element. This cannot possibly occur in the construction of Hakkers *et al.*, which, first of all, does not even talk about the provision of multiple coils. Moreover, even if two coils were

commonly wound on the same bobbin, they would not behave as a capacitive element in the absence of a dielectric separating the two coils. There is thus no way that Hakkers *et al.*, which deals with a coil wound round a **cylindrical** bobbin, can be extrapolated to the coil antennas shown in Fig. 7 of the present application being mounted on opposite **surfaces** of a planar data transaction card.

It is now recited in claim 1 that the coil antenna is formed around the integrated circuit. Support for this feature is to be found in the original disclosure where it is shown thus in Figs. 2 and 3 and the description relating thereto states, on page 7, lines 25 to 27, that:

> "The coil antenna 40 is likewise formed on the lower side 45 of the substrate 11 around the integrated circuit 30."

Claim 18 has likewise been amended such that step **(b)** now includes the limitations that the coil antenna is electrically connected to the integrated circuit via the substrate and is formed around the integrated circuit.

Claims 2, 6, 8, 10, 11 and 12 have been amended to remove the reference numerals in parentheses which appear to have remained from the PCT application from which the present application derives and are not required.

It is therefore respectfully submitted that both independent Claims 1 and 18 (as amended) are clearly patentably distinguished over both US Patent No. 5,428,214. Favorable reconsideration is requested.

In re of Appln No. 09/554,734

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings showing changes made.**"

Respectfully submitted,
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